

BiTLAN® F/UTPs cat.5e outdoor

200 MHz

Data transmission cable, screened and suitable for external applications with self-supporting element

BITNER BiTLAN F/UTPs 4x2x24AWG(0,5) cat. 5e outdoor 200MHz



external application



data transmission



UV resistance



oil resistant
EN 60811-2-1



self-supporting

RoHS 2015/863/EU



LVD 2014/35/EU



CPR 305/2011



24 months warranty

Technical data:

Thermal parameters:

Temperature range:

operating temperature: -30 °C to 80 °C
min. installation temp: -10 °C

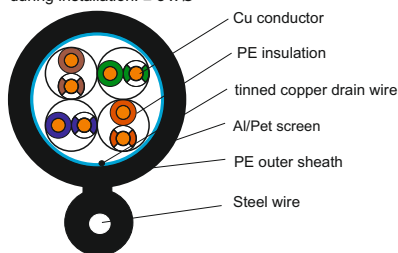
Electrical parameters:

Conductor diameter: $0,5 \pm 0,015$ mm
Insulated core diameter: $0,92 \pm 0,03$ mm
DC loop resistance at 20 °C (max): 190 Ω/km
Insulation resistance (min): 5 GΩ x km
Resistance unbalance within a pair: $\leq 2\%$
Mutual capacitance at 1 kHz (max): 50 ± 5 nF/km
Capacitance unbalance pair to ground at 1 kHz (max): 1600 pF/km
Nominal voltage: 150 V
Test voltage at 1 min.:
AC 50 Hz: 700 V
DC: 1000 V
Characteristic impedance at 100 MHz: 100 ± 5 Ω
NVP value: 69 %
Return loss dB (min):
 $f = 4 \div 10$ MHz: $20 + 5 \times \log_{10}(f)$
 $f = 10 \div 20$ MHz: 25
 $f = 20 \div 200$ MHz: $25 - 7 \times \log_{10}(f/20)$
Coupling attenuation within the range of 30 ÷ 100 MHz (min.): 55 dB
Transfer impedance at 10 MHz (max): 100 mΩ/m

Mechanical parameters:

Bending radius:

during operation: $\geq 6 \times \varnothing$
during installation: $\geq 8 \times \varnothing$



Design:

Conductors:

solid round copper conductors

Insulation:

special polyolefin compound

Core identification:

wh/bu-bu, wh/or-or, wh/gn-gn, wh/bn-bn

Core arrangement:

cores twisted in pairs, pairs twisted together

Screen:

Al/Pet screen with tinned copper drain wire

Self-supporting element:

galvanized steel wire

Outer sheath:

polyethylene PE

Outer sheath colour:

black

Marking: BITNER BiTLAN F/UTPs 4x2x24AWG(0,5) cat.5e outdoor 200MHz
EN 50173-1 ISO/IEC 11801 ANSI/TIA 568-C.2 ID no. CE RoHS www.bitner.com.pl
meters

Application:

BiTLAN F/UTPs cat.5e outdoor 200MHz cables are applicable to computer networks with operating frequency band up to 200 MHz. Suitable for transmission of data, audio and video signals, with bitrate up to 1 Gb/s. Additional collective Al/Pet screen with CuSn drain wire acts as a protection against external electromagnetic interferences. Dedicated for fixed installations within outdoor structured cabling systems as per EN 50173-1, ISO/IEC 11801, ANSI/TIA 568-C.2 standards. UV resistant outer sheath enables external application in self-supporting installations. Cables classified according to **EN 50575 (CPR)**.

Packaging:



plywood reel
500m



plywood reel/
drum
1000m

Cat. no.	Construction	Cu wire	Outer diameter* [mm]	CPR classification EN 50575	Cable weight [kg]	Bandwidth [MHz]
T10062	F/UTPs cat.5e outdoor	24AWG(0,5)	6,5x10,7	Fca	61	200

*Outer diameter tolerance: $\pm 1\%$

Cable Factory BITNER reserves the right to modify the specifications without prior notice

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Requirements of teletransmission data:

Frequency MHz	1	4	10	16	20	30	45	60	80	100	120	130	155	175	200
Attenuation $\leq$ dB/100m	2,1	4,0	6,3	8,0	9,0	11,2	13,9	16,2	18,9	21,3	23,6	24,7	27,2	29,2	31,5
NEXT $\geq$ dB	65,3	56,3	50,3	47,2	45,8	43,1	40,5	38,6	36,7	35,3	34,1	33,6	32,4	31,6	30,8
PS NEXT $\geq$ dB	62,3	53,3	47,3	44,2	42,8	40,1	37,5	35,6	33,8	32,3	31,1	30,6	29,5	28,6	27,8
ELFEXT $\geq$ dB/100m	63,8	51,8	43,8	39,7	37,8	34,3	30,7	28,2	25,7	23,8	22,2	21,5	20,0	19,0	17,8
PS ELFEXT $\geq$ dB/100m	60,8	48,8	40,8	36,7	34,8	31,3	27,7	25,2	22,7	20,8	19,2	18,5	17,0	16,0	14,8
RL $\geq$ dB	20,0	23,0	25,0	25,0	25,0	23,8	22,5	21,7	20,8	20,1	19,5	19,3	18,8	18,4	18,0

Transmission parameters graphs - examples of measurement results

